

# Claims

- [c1] A method of producing a paperboard structure, the method comprising the steps of:
- adding a radio frequency active adhesive to paperboard pulp stock;
  - forming a sheet from the pulp stock;
  - exposing the sheet to RF energy to generate heat sufficient to cause the adhesive in the sheet to soften;
  - arranging one or more of the sheets into at least partially overlapping relationship; and
  - allowing the adhesive to harden;
- wherein the adhesive is a silicate.
- [c2] The method of claim 1 wherein the arranging step comprises winding the sheet around a shaping mandrel in helical fashion to form a tube.
- [c3] The method of claim 2 wherein, as the sheet is wound around the mandrel, one edge of the sheet is brought into overlapping contact with the opposing edge of an ensuing portion of the sheet, the opposing edges become abutted together, and the adhesive adheres the edges together.

- [c4] The method of claim 1 wherein the arranging step comprises convolutely winding the sheet around a shaping mandrel to form a tube.
- [c5] A method of producing a multiple-ply paperboard sheet for dry bonding, the method comprising the steps of:  
providing a first batch of paperboard pulp stock;  
adding a radio frequency active adhesive to a second batch of paperboard pulp stock;  
forming a first sheet from the first batch of pulp stock;  
forming an RF adhesive impregnated sheet from the second batch of pulp stock; and  
affixing one sheet to the other;  
wherein the adhesive is a silicate.
- [c6] The method of claim 5 wherein the sheets are formed using a cylinder machine.
- [c7] The method of claim 6 further comprising the steps of forming a third sheet from paperboard pulp stock, and affixing the third sheet to the first sheet.